



R20 Regulation

Subject code:307DB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Regular Examinations, November 2023

ARTIFICIAL INTELLIGENCE (Electronics and Communication Engineering) (Open Elective)

Maximum Marks: 70

Date:12.12.2023 Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

Bloom
Tx

1	What are the Common Uses and Applications of AI?	L1
2	Define Problem and Problem Space.	L1
3	Define Knowledge Base.	L1
4	What are the elements of propositional logic?	L1
5	What is fuzzy logic? What is its use?	L1
6	Differentiate Depth First Search and Breath First Search.	L2
7	What is weak and strong slot in artificial intelligence?	L1
8	What are semantic nets?	L1
9	What are the components of a Game software?	L1
10	Explain Planning Problem?	L2

Part-B

Answer All the following questions.

(5X10M=50Marks)

11	Define Heuristics? Explain about any two Heuristic search techniques in AI (Artificial Intelligence). [10]	L2
OR		
12	Solve Travelling Salesman Problem using any AI technique. [10]	L3
13	Differentiate with example representation of Instance and ISA relationships. [10]	L2
OR		
14	Differentiate between declarative and procedural representation of knowledge. [10]	L2
15	Explain the non-monotonic reasoning. Explain different subtypes of non-monotonic reasoning. [10]	L1
OR		
16	Explain probability and Baye's theorem. [10]	L1
17	Explain semantic net and frames with proper example. [10]	L1

	OR	
18	Define Scripts. Write conceptual dependency for following statements. [10] <ul style="list-style-type: none"> • John flew to New York • John Shot Mary • John ate eggs 	L2
19	Explain goal stack planning using suitable example. [10]	L1
	OR	
20	Explain Min – max search procedure with an example. [10]	L1